The Gas Company℠

Interoffice Memo

To: Judy L. Young, Esq.

From: Gordon Schlesinger

Date: May 26, 1993

Subject: FCC PR Docket No. 92-235; Filing of SCG Comments

Enclosed are the originals of the SCG Comments on the referenced Docket. Please use the following procedure to complete the filing process.

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of:

Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them	))))	PR Docket No. 92-235

To: The Commission

COMMENTS OF THE SOUTHERN CALIFORNIA GAS COMPANY

EXECUTIVE SUMMARY

SCG, both as a major public utility and a PLMRS licensee with a very large private fleet of vehicles, herein presents its views concerning PR Docket No. 92-235. In summary, SCG:

- Agrees with the basic premises and goals of the instant Docket
- Strongly urges the creation of the maximum number of duplex pair channels on the 150-162 MHz frequency band
- Requests that the Commission take a leadership position in ensuring that "narrowband" communications technology becomes available which meets both the technical requirements of the proposed Part 88 Rules and the operational needs of PLMRS licensees
- Urges a liberalization of eligibility requirements for "Innovative Shared Use" licenses to include consortia of public utilities
- Requests that contiguous frequency blocks and Multiple Access emissions be made available to Exclusive Use licensees in the Public Safety and Non-Commercial categories
- Recommends that the Commission institute codified channel sharing of the refarmed spectrum in areas proximate to the US-Canada and US-Mexico international border areas
- Strongly requests that the Commission revisit the proposed technical and operational standards proposed in Part 88 in view of the needs of Non-Commercial and Public Safety eligibles in the western United States for wide area coverage systems
- Recommends that the proposed license category "Non-Commercial " be renamed "Private Fleet," to avoid possible mis-interpretation of eligibility requirements.

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To: The Commission

COMMENTS OF THE SOUTHERN CALIFORNIA GAS COMPANY

1. These Comments concerning PR Docket No. 92-235 are filed by the Southern California Gas Company ("SCG"). SCG is a transporter and supplier of natural gas and related products and services to approximately 4.5 million consumers located within the southern one-half of the state of California. SCG has been a licensee of the Commission in the Private Land Mobile Radio Service ("PLMRS") for more than 30 years. Presently SCG holds licenses in the Power Radio Service ("PRS"), Industrial/Land Transportation Radio Service ("I/LT") and Business Radio Service ("BRS") (47 Code of Federal Regulations Part 90). SCG operates a very large private fleet of field service vehicles in the conduct of its operations. Approximately 3000 of these vehicles utilize PLMRS equipment and communications. The bulk of SCG's present vehicular communications occur on the 150-162 MHz frequency band, which is a central focus of the instant Docket[1]. SCG therefore has a direct major interest in these proceedings.

[1] As described infra, SCG is developing new mobile radio dispatch communications systems on PLMRS frequency bands above 512 MHz, which bands are not the subject of this proceeding.

I. SCG GENERALLY CONCURS WITH THE DIRECTIONS AND GOALS OF PR DOCKET NO. 92-235

2. PR 92-235 is, a priori, the most extensive review and revision of the PLMRS Rules in more than 40 years, a time period during which private land mobile radio communications have advanced from relatively simple, developmental voice dispatch systems to sophisticated networked, quasi-digital integrated voice and data dispatch systems. At the same time, the highest operating frequencies utilized for PLMRS communications increased from 162 MHz to 940 MHz, a factor of nearly six, and typical vehicular equipment evolved from large, heavy, trunk mounted, power-consuming vacuum tube transmitter/receiver installations to small, sophisticated, microprocessor controlled, solid state transceivers. The communications world of the last few years of the twentieth century is very much different from that of the 1950s. SCG agrees that review and revision of the PLMRS Rules is apropos at this time.

3. Nevertheless, the instant Docket is very large and inclusive, necessarily covering the gamut of all PLMRS services, communications, and activities. At the same time, SCG's principal business interests do not center on PLMRS communications. SCG is a "user" organization, in the context of its operation of a large, private fleet mobile radio dispatch system. SCG cannot devote the resources to respond to all of the proposals and technical details contained within the instant Docket. We have, therefore, focused our responses to analysis, recommendations, and counter proposals in areas which do directly affect our mobile radio communications. We hope and believe that the Commission will consider our responses as

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Nevertheless, SCG retains a substantial and continuing interest in the PLMRS VHF radio frequency bands.

generally representative of those of the public utility industry, and will utilize our responses in the formulation of appropriate parts of the Report and Order which it will issue.

4. Generally, SCG well understands the necessity for "refarming" of the original PLMRS frequency bands[2]. SCG, as indicated by its own corporate name, operates its radio dispatch system within one of the most crowded, complex, and difficult mobile radio environments in the United States. SCG accepts the basic premises upon which the Docket is constructed:

> "....to increase channel capacity in these bands, to promote more efficient use of these channels, and to simplify [our] policies governing the use of these bands by a wide variety of small and large businesses and public safety agencies throughout this nation.[3]"

Therefore, with some reservations and with a set of recommendations and counter proposals to be presented infra, SCG accepts the four major changes proposed in the instant Docket: spectrum efficiency standards, channel use exclusivity, consolidation of existing radio services, and technical and operational Rules changes. We are mindful that these proposed changes will result in increased complexity and cost to SCG in the conduct of its business activities. Nevertheless, as a corporate "good citizen" SCG will accept these additional burdens for the goal of increasing the access to and the useability of a scarce public resource, the radio frequency spectrum.

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[2] i.e., the original "low," "mid," and "high bands" of the post World War II era, together with the original "UHF" frequency band of the 1950s. We note that, and question why, refarming of the 30-50 MHz frequency band is not included in the instant Docket.

[3] NPRM at #1

II. DUPLEX PAIR USAGE MUST BE ESTABLISHED ON THE 150-162 MHZ BAND

5. SCG calls attention to a major area of the proposed refarming action which it believes to be at variance with both established custom and current need: the general scarcity of proposed paired duplex[4] channel assignments on the 150-162 MHz frequency band[5].

6. Historically, the Commission began to allocate paired duplex frequency pairs with the establishment of the 450-470 MHz frequency band during the decade of the 1950s. Prior to this point, the earlier-established private land mobile channel allocations on the 30-50, 72-76, and 150-162 MHz bands had generally been set on a simplex basis[6]. Yet the post-450 MHz implementation historical record clearly demonstrates the wide spread acceptance of the paired duplex channel allocation arrangement, and the concurrent establishment of the "mobile relay" base station style of operation.

7. Over the past 40 years, virtually all of the 450-470 MHz band allocations have remained paired duplex; very little unpaired (i.e., "simplex") activity remains on the primary

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[4] See Section #88.7 for the definitions of "simplex" and "duplex" radio communication system operations.

[5] SCG notes, of course, the 258 duplex pairs proposed for "shared innovative use," and 28 pairs proposed for the Non-Commercial Service (#88.231). The shared innovative use pairs, however, at best will benefit only a few licensees who operate exceptionally large fleets. The other 28 pairs are clearly insufficient for Non-Commercial Service eligibles' needs. SCG will present its thoughts about the "shared innovative use" proposal infra. The present discussion relates to all other channels proposed for the 150-162 MHz band.

[6] A few duplex allocations may have been granted on the lowest three frequency bands; SCG does not have access to the historical record to verify the total absence of duplex allocations prior to the 1950s. Nevertheless, SCG's argument does not depend critically upon the absolute veracity of the assertion.

channel allocations[7]. More importantly, all additional frequency bands later authorized for use by the PLMRS have been overwhelmingly established with paired duplex channels[8], and operated as mobile relay stations.

8. The above having been asserted, SCG contends that the paired duplex channel model, with its facility for establishing mobile relay communications, is firmly established by custom and precedence, has been embraced by large numbers of PLMRS eligibles, and is the method of choice for most land mobile communications. Thus SCG finds it at the least disconcerting that the Commission, in proposing a complete restructuring of the 150-162 MHz band, has not on an a priori basis fully configured the band with paired duplex allocations[9]. SCG's planning for future land mobile operations on the 150-162 MHz band is critically predicated on the assumption of availability of paired duplex channels. SCG believes that other present PLMRS licensees, also surveying their future needs, hold similar views.

9. SCG presently operates its voice dispatch systems on both simplex and duplex channel

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[7] Some eligibles, c.f. Taxicab Radio Service, have elected to operate their licensed paired channels in a "half duplex" mode (i.e., without automatic retransmission of the communications from the mobile transmitting channel on the associated base station transmitting channel). In no way does the existence of some half duplex operation negate the arguments which SCG advances.

[8] These bands include the 470-512 MHz, 420-430 MHz, 800 MHz, 900 MHz, 800 MHz NIPSPAC, and 220-222 MHz frequency bands. Indeed, the public land mobile service (i.e., 800 MHz cellular) band consists almost exclusively of paired duplex channels. The channelization "raster" may be different on each of the cited frequency bands, but they clearly are composed overwhelmingly of paired duplex allocations.

[9] With the exception, of course, of the Innovative Shared Use Operation channels and a few Non-Commercial Service channels, vide Proposed Rules #'s 88.997 - 88.1019, and #88.231. These are explicitly cast as duplex channels.

pairs[10]. We have determined through our operating experience that the duplex channel configuration greatly aids our field operations. Individual field workers, enjoying the ability to monitor all of the radio traffic within their operating region, are kept aware of the needs and requests of their fellow employees and can respond rapidly to requests for assistance or tools and materials[11]. The ability of each field worker to monitor all activity on a radio channel virtually eliminates simultaneous transmissions from two or more mobiles who, on a simplex channel, may not be able to determine when other mobiles are transmitting to the base station. This channel monitoring ability aids in overall message "throughput" on a given communications channel.

10. SCG is in the process of establishing an extensive mobile data radio dispatch system, known as PACER (Portable Automated Centralized Electronic Retrieval system), in order to more efficiently and more rapidly transmit customer service work orders to its field workers. SCG anticipates, using this new system, achieving up to a factor of 10 increase in message throughput on each operating channel, compared to conventional voice dispatch[12]. SCG has reached the conclusion, in developing the PACER system and evaluating the various mobile data transmission alternatives, that the availability of duplex channel pairs greatly facilitates the

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[10] Simplex dispatch operations occur on 153 MHz Power Radio Service channels, while duplex operations occur on 450, 800, and 900 MHz Industrial/Land Transportation and Business Radio Service channels.

[11] Work dispatchers still maintain overall control of the radio traffic on each field division communications channel.

[12] SCG, however, will not discontinue its voice dispatch operations, which will still be required for non-routine messages, special circumstances, and coordination of emergency operations. Voice and data radio communications, however, will not share common channels; each type will be assigned dedicated channels.

establishment of such systems. For this reason, PACER will initially be operated on 900 MHz frequency pairs. Yet SCG possesses licenses for a significant number of 153 MHz channels and would like to retain the option, after refarming of the 150-162 MHz band is complete, to utilize new, narrowband VHF duplex pairs for at least some of its PACER system. SCG believes that other utilities and large private fleet operators, who also will be establishing mobile data systems, would equally benefit from accessibility of duplex frequency pairs at 150-162 MHz[13].

11. A part of SCG's "future vision" for its mobile fleet communications involves establishment of a "networked" system. Using voice, ASCII text, or graphical data communications mode, any mobile unit within its 22,000 square mile service territory could communicate with, by specific unit number, any other mobile unit or any regional dispatcher[14]. Such networks operate in a more efficient manner when the terminus communications channels are duplex, rather than simplex.

12. For the above reasons, SCG urges the Commission to reconsider the allocation of operating channels on the refarmed 150-162 MHz frequency band. SCG believes that the continuation of the simplex model, developed at the dawn of the PLMRS, into 21st century advanced networked voice and data communications is singularly inappropriate, and should be avoided. SCG believes that PLMRS licensees, especially operators of large private fleets, must be offered the opportunity to operate on new, narrowband duplex frequency pairs on all PLMRS

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[13] Identical arguments can be advanced for the 30-50 MHz PLMRS frequency band. SCG is not a licensee on this band, but advances the suggestion that duplex channel pairing for licensees of large private fleets should also be permitted on this frequency band.

[14] SCG owns and operates one of the largest (in land area covered) private fully digital microwave networks in the country. Interconnection of individual mobile relay base stations will be accomplished principally through its microwave network.

frequency bands. Either such provisions must be written explicitly into new Part 88 Rules, or the Rules must facilitate "sharing arrangements" by means of which several operators of large fleets can pool their frequency resources to create these needed duplex frequency pairs.

on the 150-162 MHz PLMRS frequency band, from the existing 15 kHz-spaced channels[17], implies a potential capacity restriction of the "refarmed" channels. Such restriction represents risk to SCG in terms of its ability to utilize 5 kHz channels for its requisite business needs. Without such needs being met, SCG cannot wholeheartedly support the refarming action.

16. Presently SCG's PACER system specification requires transmission of digital data to its field units at 4800 bits/second on 12.5 kHz-spaced, 900 MHz PLMRS channels. Such transmission speed is the rate limiting step in the present PACER communications network[18]. An increase in the data transmission rate to/from vehicles to 9600 bits/second would be desirable in operational terms; it may, in fact, be required for practical digitized voice and graphical data transmission.

17. SCG has surveyed current communications technology predictions of future potentials for data communications channel capacity. We are led to believe that a practical goal of "2 bits/second per Hertz" is obtainable by the end of the decade[19]. If this proves to be the case, than the proposed "5 kHz channels," which provide an occupied bandwidth of only 4 kHz, would be capable of supporting data transmission of at least 8 kilobits/second. This would be close to the desired 9.6 kilobits/second specification.[20]

18. SCG believes that the Commission's proposals in Docket No. 92-235 are, in part,

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[17] And, indeed, occupied bandwidths presently as wide as 20 kHz on the 450-470 and 800 MHz PLMRS frequency bands

[18] For example, data transmission to/from the SCG host computer to the Radio Management System Controller via the SCG digital microwave network occurs at 256 kilobits/sec.

[19] And, if recent discussions are accurate, perhaps considerably earlier

[20] The ratio required for 9600 bits/sec would be 2.4 bits/second per Hz.

an attempt to drive the state of the art in PLMRS communications technology. This is clearly a legitimate function for a federal regulatory agency[21]. Nevertheless, if the Commission proposes to mandate establishment of 5 kHz channels, then, SCG believes, it has an obligation to its existing licensees to make whole their interests which are affected by its actions. In this case, SCG believes, the Commission has an obligation to foster discussion within the PLMRS equipment industry about needs, goals, and schedules for development of the requisite technology for operation of practical radio communications systems within the occupied bandwidths which it mandates.

19. The proposed Rules, if adopted, will require virtually a complete replacement of SCG's current 153 MHz mobile dispatch system. Such replacement, for an operator of a very large public utility mobile fleet, is a major capital expenditure, requiring both large amounts of corporate resources and approval from the Public Utilities Commission. Multi-year planning cycles are involved. For this reason, it is necessary for licensees such as SCG to have equipment availability information as early as possible, so that the necessary planning, approvals, and budgeting may be accomplished. SCG calls upon the Commission to facilitate and to distribute the results of such discussions, beginning with the Report and Order in the instant Docket.

IV. THE POTENTIAL FOR OBTAINING CONTIGUOUS CHANNEL BLOCKS MUST BE RETAINED

20. Implicit within the instant Docket is the assumption by the Commission that the

[21] c.f., for example, the Department of Transportation's establishment of Corporate Average Fuel Economy (CAFE) standards for manufacturers of automobiles and trucks

fundamental decisions concerning the operating format(s) of the refarmed spectrum have already been completed. The channel bandwidths for the 150-162 and 450-512 MHz bands have been fixed by the proposal to restructure the bands with 5 and 6.25 kHz channel spacings respectively.

21. These "narrowband" bandwidths inherently restrict the use of certain emissions modes, and favor the use of others[22]. Nevertheless, SCG believes that developments in Multiple Access emissions modes for the PLMRS should not arbitrarily be dismissed; these developments include Code Division, Time Division, and Frequency Division Multiple Access. However, each of these emissions modes inherent requires bandwidths wider than those proposed to be made available through the instant Docket.

22. In order to maintain flexibility in selection and use of emissions modes, SCG believes that provisions should be incorporated in a Report and Order to allow Public Safety and Non-Commercial Services "exclusive use" licensees access to contiguous channels, as well as authorization to utilize their total occupied bandwidth for Multiple Access emissions modes, providing that no damage is caused to adjacent channel communications.

V. QUALIFICATION REQUIREMENTS FOR ACCESS TO INNOVATIVE SHARED USE CHANNELS MUST BE LIBERALIZED

23. SCG finds the Commission's proposal for the Innovative Shared Use Channel concept[23] to be both constructive and of interest. Clearly the concept of adaptive sharing of

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[22] For example, the use of current format F3E and F2D emissions would be difficult within the proposed occupied bandwidths, while the use of certain envelope modulation methods appears to be feasible.

[23] Proposed Part 88, #s 88.997 - 88.1019

a common frequency resource among participating licensees will lead to the sort of spectrum efficiencies generally envisioned in the instant Docket. Additionally, successful implementation of the concept in the 150-162 MHz frequency band may well serve as a model for similar activities in the other PLMRS frequency bands. Finally, as discussed supra, the availability of duplex channel pairs[24] forms a strong incentive for operators of large private fleets.

24. SCG generally favors most of the details of the Commission's proposed plan for implementation of the Innovative Shared Use concept. For example, SCG agrees with the Commission's proposals to limit speculative acquisitions of these licenses; licenses must be awarded to those entities who can construct and utilize the frequencies promptly[25]. SCG believes that these authorizations should be reserved for existing licensees who meet the proposed minimum eligibility requirements. SCG also favors cooperation among the Innovative Shared Use licensees rather than Commission intervention to resolve questions concerning shared operating requirements and interference problems.

territory[27] in which it operates. Thus SCG would, on the face of it, be prohibited from eligibility for an Innovative Shared Use license. In point of fact, few if any present PRS licensees would qualify, and, in fact, the entire public utility industry (exclusive of the RBOCs themselves, who would be excluded by #88.1005) would be excluded. Realistically, under the present Commission proposal the most probable licensees of the Innovative Shared Use channels would be entities which operate nationwide.

26. Independent of the instant Docket, discussions among public utilities concerning sharing of communications resources have already begun. Such discussions are directly fostered by the need to reduce capital and operating/maintenance expenses as the utility industry is increasingly opened up to competition from alternative suppliers[28]. In the forthcoming years, the utility world will experience increasing deregulation and consumers will be offered choices in the selection of their providers. In an unregulated market, the unit price of a commodity plays a great role in consumers' purchasing decisions, and utilities face increasing pressure to lower their prices through controlling their costs.

27. SCG believes that some future sharing of utility communications resources will occur in any case, absent Commission prohibitions against the sharing. Thus some increased spectrum efficiencies are likely. However SCG believes that the Commission has an excellent vehicle

28. To this end, SCG proposes that one of the five Innovative Shared Use licenses be reserved for a consortium of eligibles in the present Power Radio Service . As described supra, no one utility has a service territory as large as an individual RBOC. Yet a number of PRS licensees operate within each RBOC territory, most engaged in similar types of field activities, and in many instances they have needs to communicate with each other via PLMRS radio. Collectively, these PRS licensees within a given RBOC territory can easily generate spectrum usage at least equal to any other Innovative Shared Use licensee. A definite need exists for public utility access to this spectrum and SCG firmly recommends that this need be filled

are inherently long-lived[30]. Utilities who desire licensing in the Innovative Shared Use category will expect to retain and use their operating channels for several ten year license cycles at a minimum. For these organizations the requirements of #88.1015 appear daunting; they introduce an element of risk in dedicating capital for the operating channels and equipment which may be neither acceptable nor prudent to assume.

31. For example, if the provisions of #88.1015 were to be strictly enforced, at the end of fifty years a licensee would be required to demonstrate an improvement in channel capacity of at least thirty-two times compared to its first day of operation. Since by today's standards a PLMRS channel generally does not operate with more than one hundred mobile units, #88.1015 would require an increase to at least thirty two hundred mobile units per channel after fifty years.

32. Given the laws of physics which determine the theoretical maximum capacity of a communications channel, this fifty year goal would appear to be speculative at best, and quite likely unachievable. Rather than the Commission's mandating a fixed efficiency increase requirement, immutable for all future time, SCG proposes that the requirements of #88.1015 be revisited by NPRM Docket proceedings several years prior to the beginning of each new ten year license cycle, and that new efficiency improvement requirements for the forthcoming cycle be determined based upon the state of the art of communications technology prevalent at those times.

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[30] SCG, including its several predecessor companies, has accumulated well over one hundred years of operation in southern California.

VI. REFARMED PLMRS SPECTRUM USAGE MUST BE COORDINATED WITH CANADA AND MEXICO

33. The proposed "refarming" of the private land mobile bands below 512 MHz is modeled in part upon the successful implementation of the UHF bands above 806 MHz from the

essentially similar technical Rules for the refarmed spectrum, the potential for conflict exists between entirely different types of emissions in co-channel use in close geographical proximity. Additionally, considerable conflict would result between stations on one side of a border attempting to operate on different channelization rasters (i.e., different "band plans") from stations operating on the other side.

36. Even if all technical considerations were resolved among the three countries, a major potential source of conflict would remain if specific border sharing arrangements for individual channels on the bands below 512 MHz are not adopted.[33] Such co-sharing arrangements, SCG suggests, are critical; without them, the incentive to invest in new technology and to conform to the proposed highly efficient new emissions modes would be greatly reduced for licensees in the affected geographical areas.

37. SCG has operated its mobile fleet communications on 153 MHz Power Radio Service frequencies for more than 30 years. Its service territory reaches, in part, south to the US/Mexico border. While SCG has obtained, through the appropriate US coordination agencies, unhindered use of the 153 MHz frequencies through its service territory, it has always been at risk from co-channel transmissions originating south of the international border.

channel US licensees[35], and they have not done so. At times co-channel emissions originating in Mexico have caused harmful interference to SCG's field communications. Since SCG's principal business involves transporting highly flammable hydrocarbons under high pressure, this kind of interference cannot be tolerated; a safety of life and property issue exists here.

39. Equivalent considerations apply to other licensees in the Power Radio Service whose service territories are proximate to the international border[36]. Clearly the problem easily can be generalized to include all licensees on the bands below 800 MHz. Thus a single, universal approach to the problem of bilateral cooperation is warranted. That solution, SCG believes, is an extension of the codified trans-border channel sharing arrangements presently existing above 806 MHz. SCG calls upon the Commission to adopt, in its Report and Order in the instant docket, provisions for division of the available frequencies on the bands below 512 MHz between the US and Canada, and between the US and Mexico.

40. Nevertheless SCG would caution the Commission that the established geographic demarcations utilized for this purpose in the bands above 806 MHz (Lines A and C, and the 110 km "border" zone with Mexico) may not be appropriate for the bands below 800 MHz. Because of the greater propagation range (per watt of ERP) at these lower frequencies, acceptable co-channel activities between stations on both sides of a border may require greater separations than those presently utilized above 800 MHz. For example, SCG has noted repeated instances of

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[35] In fact, to the best of SCG's knowledge, there is no requirement that Mexican co-channel communications utilizing SCG's coordinated 153 MHz channels even be restricted to Mexican public utilities.

[36] SCG has received reports from other utilities of similar interference originating south of the US/Mexico border.

extremely destructive interference, originating below the US/Mexican border, affecting its 153 MHz communications at distances greater than 110 km north of the border, with harmful interference (from the same source) reported from its field personnel at distances up to 320 km from the border.

41. Without effective international co-sharing agreements below 800 MHz, SCG would have to critically assess the effective utility of the refarmed spectrum across its service territory prior to committing substantial capital for new technology. We cannot help but believe that other licensees proximate to international borders would have similar concerns.

VII. THE PROPOSED TECHNICAL STANDARDS ARE INADEQUATE FOR USE IN THE WESTERN UNITED STATES

42. Within its service territory, SCG operates mobile dispatch radio systems on the 150, 450, 800, and 900 MHz frequency bands. Because of a number of concurrent factors, the southern California geographical region is arguably one of the most difficult areas of the United States in which to operate PLMRS stations. These factors include a very high population density, geographical service territories which are considerably larger than those typical for east coast and midwestern licensees, an exceptionally high degree of utilization of land mobile radio across all the Mobile Services, very high elevation mountain top base station locations which provide greatly expanded mobile service ranges, very high aggregate radio frequency power levels enveloping communications sites, high levels of man-made radio frequency noise enveloping urban areas in which mobile units operate, and unusual radio propagation conditions (tropospheric ducting) which often produce greatly enhanced communications ranges. SCG, with over 30 years of PLMRS communications systems operating experience, well understands these

factors.

43. SCG does not believe that a "uniform" set of technical operating parameters regulating the refarmed spectrum for the entire United States is either apropos or beneficial. Practical operating conditions in southern California[37] are very different from those in rural New England. The Commission has in part recognized these differences in recent years by authorizing additional ERP for some Part 90 stations operating from high mountains in California and Washington[38]. SCG believes that similar considerations should apply to the refarmed spectrum which is the subject of the instant Docket.

44. The Commission has, in issuing PR Docket No. 93-60[39], indicated a willingness to reconsider detailed technical and operating considerations for all Part 90 stations operating above 800 MHz. Docket No. 93-60, as indicated therein, is the latest step in a lengthy process of examining operating standards for Part 90 stations operating on those PLMRS frequency bands which will not be subject to refarming. Docket No. 93-60 is, SCG believes, an entirely appropriate and reasonable examination of the premises which underlie the assignment of technical operating parameters for these stations, in the light of past experience and current engineering thought.

45. Moreover, SCG strongly believes that the considerations given to the Rules[40]

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[37] As well as in northern California and the larger metropolitan areas of the nation west of the Rocky Mountains

[38] c.f. Table C-13, #88.429(j)(2) for ERP exemptions for some southern California base stations operating above 851 MHz

[39] Released April 7, 1993

[40] c.f. #88.429

governing power and antenna height limits in the instant Docket have been insufficient. Granted that PR Docket No. 93-60 was released after PR Docket 92-235, nevertheless SCG urges the Commission to set aside the Technical Standards and General Operating Requirements portions of Docket No. 92-235 and to broaden Docket No. 93-60 to include power and antenna height